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Effective Workforce Management using HR Analytics

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Abstract

HR Analytics has been widely used in organisations for gathering and interpreting data which has made the management able to take wise decisions regarding their workforce, which constitutes the major part of decision making in the organisation. It is a set of statistical tools that enables an HR analyst to come out with imminent data regarding employees and thus take accurate decisions which support the objectives of top management. Analytics helps in analysing and forecasting data regarding key HR metrics in employee value and performance. The utilisation of data to determine ROI in the strategic decisions taken will help in the growth of business. There have been many papers which focus on the conceptual part and acceptance of HR analytics in firms. This paper stresses the basic facts on using HR analytics as a tool for effective workforce management in organisations and considers the opportunities and challenges on the extent of its utility. This study gives theoretical concepts alone based on secondary data collected from leading research papers and opinions of research scholars, company reviews and various blogs.

Keywords: *HR analytics, HR metrics, HR Analytics opportunities, HR Analytics challenges, Organisational Effectiveness*

1. Introduction to HR Analytics

Human Resource Analytics, which can also be called as workforce analytics or talent analytics is one practice which will help all the organisations to work on their human resource data effectively and efficiently which will boost the growth of their organisations. It is very vital in predicting key parameters that enables to take effective decisions regarding many employee data. HR Analytics is meant to act as a tool that is a combination of statistical techniques that enable collection, interpretation, measurement, and forecasting of data [1]. By the usage of analytics, HR

professionals get a deeper understanding of current movements, employee future, and the best ways to move forward with productivity. There is skill shortage and rising demand for effective workforce planning if the firms have to make a niche for themselves. The ultimate task of human resource managers has always been to groove the competencies and skills of employees. It is vital to measure the attributes and performance of employees which can be done using the workforce analytics which will help transform data into quantifiable results. This will help in workforce planning for the top managers and help take

strategic decisions.[2][15] Human resource metrics enables to understand whether the results of the HR analytics are correct. It helps to determine the effectiveness and efficiency of company human resource policies. Analytics tells what is happening, why it happened and what is the outcome of that. If in a company there is an opinion in the managerial level concerning the employee parameters, data is taken to factualise the opinion whereby the corresponding metric is analysed, it can be regarding cost of lost productivity due to absence, cost per hire and another relevant metric. Analytics helps to identify the causes and tells how it affects the business. The information helps to identify pitfalls in HR metrics evaluation which generates an insight amongst managers which eventually helps to rectify or average the metric reducing the impact of the poorer metric data. [3][9]. Human resources metrics (HR metrics) are key figures that help firms to analyse their human capital and measure how to find ways to utilise their human resources. Examples of such human resource data include parameters extending from recruitment, employee engagement and retention, time tracking, employee value and performance, training and development to human resource service and software. To stay competitive in a technology-driven world, firms need to encourage innovation and this makes it more challenging to define employee metrics, but HR analytics helps to relate well with performance metrics as it helps to track effectiveness of metrics on HR and business outcomes.[12][13] It helps to understand how to accomplish business objectives through analysis, prediction and producing quantifiable sustained results. Earlier HR analytics focussed on the present data like employee cost per hire, but nowadays they realise a consistent, general view is important to perform effective workforce management and to perform workforce optimisation and for that it is crucial to recruit HR analysts with skills and capabilities to analyse how to produce better ROI for the company by strategically managing human resources. What is important to note is the beauty of the HR Analytics implementation process. [9-12]. As known, HR Analytics is stated as the process of collecting, processing, transforming and managing HR related data which is the further put to analytical data models and the process of analytics focusses on

connecting human resources practices to strategic business plans and to achieve desired goals it uses a level of descriptive, predictive, and prescriptive methods having its benefits.[4]

The first level of analysis is the Descriptive Analytics which includes a clear understanding of the historical data, behaviour thus only describes the relationship. It involves the use of data visualization, adhoc reports, drilling-down, dashboards / score cards, SQL Queries. It is possible to track the turnover rates, cost per hire and absence rates using descriptive analysis.

The second level of analysis is Predictive Analytics which includes forecasting the future behaviour and outcomes based on the past data and results. The methodology involved is the usage of Data Mining, decision trees, pattern recognition, forecasting, root-cause-analysis, and predictive modelling. HR managers can forecast attrition rates, probability of employee success on job based on recruitment / selection methods used using predictive analysis.

The third level of analysis is Optimization Analytics, that includes achieving the best results by using limited resources. The techniques involved uses linear programming, simulations, creating mathematical modelling.[5][10]

1.1 Key areas of workforce management using HR analytics

HR Analytics is crucial for the following areas which proves beneficial for a better management of the organisation workforce:

- It provides evidence-based corrective actions to reduce unwanted employee turnover thus enabling proper hiring in critical positions and predicting top talent and successors for an organisation.
- It helps to take actions by analyzing the absenteeism rate and factors of excessive absenteeism which will help keep a check on the organizational wellbeing.
- It exhibits diagnostic data on the revenue per employee (RPE) which is the measure of how much every employee does contribute to the organisation.
- It helps to diagnose employee productivity index which helps to focus on staff

performance and find those doing well and otherwise.

- It helps to evaluate morale and motivation level of the employees.
- It provides rational quantifiable data on the validations of cost of hire of each employee.
- It generates results to keep check on the cost of training of an employee and thus keep a check on the unwanted expenditure. This will help the management to reanalyze their training effectiveness index as well.
- It plays a key role in the retention of employees and the talent turnover rate and helps to relate factors in common.

The HR metrics, also termed key performance indicators (KPIs) help to evaluate the efficiency of an organisations objectives and policies.[11-13] The HR analytics data helps to quantify the cost and evaluate the impact of each human resource policy practice thus providing areas which needs improvement.[6] It provides valuable data string enough for a complete strategic reformation based on hard data and allows the managers to allow room for adjustment so as to boost the company growth. [14]

2. HR Analytics challenges and opportunities

Even before the advent of world wide web, the solitary human resource aim has always been to find ways to improvise employee information on performance appraisals, compensation, training and development and others maintain hard copies. As and when technological innovations boomed, there has been a keen interest in transition from judgement-based actions to data-based actions and decisions making. For this collective data has to be mined and the pattern of decision making fixed for arriving at strategic decision for the workforce at hand. It is evident organisations need to have a competitive edge in order to survive in the long run and for that it is vital to possess predictive analytics skills.[7]

2.1 Opportunities of using HR Analytics

The normal human resource functions exhibit dynamic and complex accountability with all the flow of digital communication. In 2021,

with this era of digital disruption striking its peak, it is quite imperative that the human resource department focuses on taking key decisions in key areas of their workforce in the organisation. In view of this some of the opportunities using HR analytics for effective workforce management are:

- **Better trade-offs in HR metrics:** Using the HR analytics diagnostic methods organisations can apply historical and current trends and collect performance data which will help sustain changes in company policies and nevertheless manage tradeoffs between higher and lower impact workforce metrics.
- **Enhanced competitive edge:** Data driven and strategic decisions regarding workforce helps a firm to obtain a competitive edge in their daily operations and thus establish the planned objectives
- **Authentic HR data:** Investment in analytical softwares will help the organisation to find results which are authentic and thus keep it transparent to the stakeholders.
- **Increased productivity time:** Automation of many personnel subsystems using analytical tools will free the HR executives of their monotonous jobs and help them to work on other asks.
- **Improved quality thresholds:** By proper analysis of employee data all the data in organisation is kept under constant check which will improve the quality thresholds of human resource metrics.
- **Forecasting ROI:** Many organisations can increasingly use analytics in day-to-day HR operations and assess the return on investment in key areas like talent management, training and retention of employees as well as predicting the impact of people policies of the organisations.

2.2 Challenges in using HR Analytics

- HR analytical diagnostic tools are the need of the hour. HR executives should concern themselves with the need of a broader perspective. Henceforth, some of the many reasons that can be the cause of lagging of implementation of HR analytics in organisations cited are:

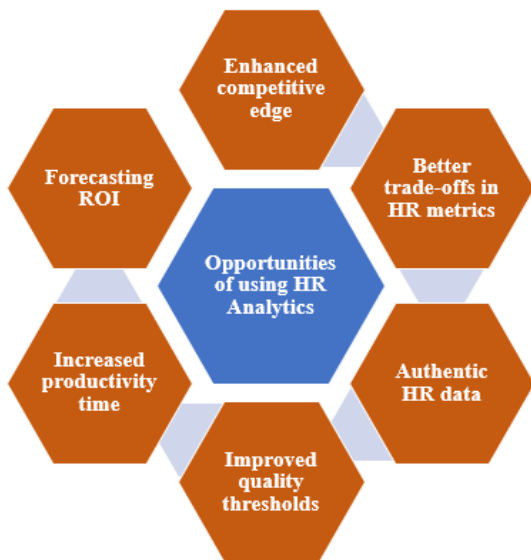


Fig.1. Opportunities of using HR Analytics

Fig.2.Challenges in using HR Analytics

- **Lack of cooperation from HR executives:** Sometimes HR executives refuse to indulge in advanced analytics that can prove a gain for the workforce.
- **Shortage of skilled HR analyst:** There is a shortage of skilled HR analysts who know precisely to use the innovative technology. It is important to possess skilled workforce who are trained specifically for analytics of the big data.
- **Burden of capital investment:** There is a wrong notion of a huge capital investment in the advanced HR analytics technologies embedded with machine learning such that the organisation considers it a financial burden and fails to implement it.
- **Lack of actual data:** Lack in legality and ethicality of actual employee data which is prima facie in good governance. Analytics thrives on data driven decisions for which the collected data is very relevant.
- **Lack of Support from top management:** The thought that cognitive intelligence softwares comes with a price tag combined with loss of data integrity baffles the top management who then becomes reluctant to implement analytical tools to their advantage.
- **Fear of hacking sensitive personnel data:** With all the digital communication, the fear of hacking of employee sensitive personal data is a much growing concern with the HR executives and organisations.

Conclusion

HR analytics has been adopted by many giant IT organisations and they have started making better employee decisions [8] yet continues to be neglected by many. The organisations need to seriously consider the much-adopted importance of using the analytical tools to their advantage. But in many industry sectors, the immediate prospects in maintaining effective workforce have made all HR practitioners to look forward to improved HR practices with analytical data to the extent of forecasting employee turnover, attrition rates, learning and development, talent management. This research paper explores secondary data and information collected from journals, blogs and websites on HR Analytics.

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